FlyBy Math^{TM} Alignment
To the Massachusetts Mathematics Curriculum Framework
Grade-Level Standards, November 2000

Patterns, Relations, and Algebra Strand

Students engage in problem solving, communicating, reasoning, connecting, and representing as they:

Grade-Level Standard	*FlyBy Math*^{TM} Activities
AI.P.4 Translate between different representations of functions and relations: graphs, equations, point sets, and tabular.	--Represent distance, speed, and time relationships for constant speed cases using tables, bar graphs, line graphs, equations, and a Cartesian coordinate system.
AI.P.5 Demonstrate an understanding of the relationship between various representations of a line. Determine a line's slope and x- and y-intercepts from its graph or from a linear equation that represents the line. Find a linear equation describing a line from a graph or a geometric description of the line, e.g., by using the "point-slope" or "slope y-intercept" formulas. Explain the significance of a positive, negative, zero, or undefined slope. (10.P.2)	--Represent distance, speed, and time relationships for constant speed cases using linear equations, and a Cartesian coordinate system. --Interpret the slope of a line in the context of a distance-rate-time problem.
AI.P.12 Solve everyday problems that can be modeled using systems of linear equations or inequalities. Apply algebraic and graphical methods to the solution. Use technology when appropriate. Include mixture, rate, and work problems. (10.P.8)	--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios. --Represent distance, speed, and time relationships for constant speed cases using linear equations, and a Cartesian coordinate system. --Use tables, bar graphs, line graphs, a Cartesian coordinate system, and equations to model aircraft conflicts and predict outcomes.